

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

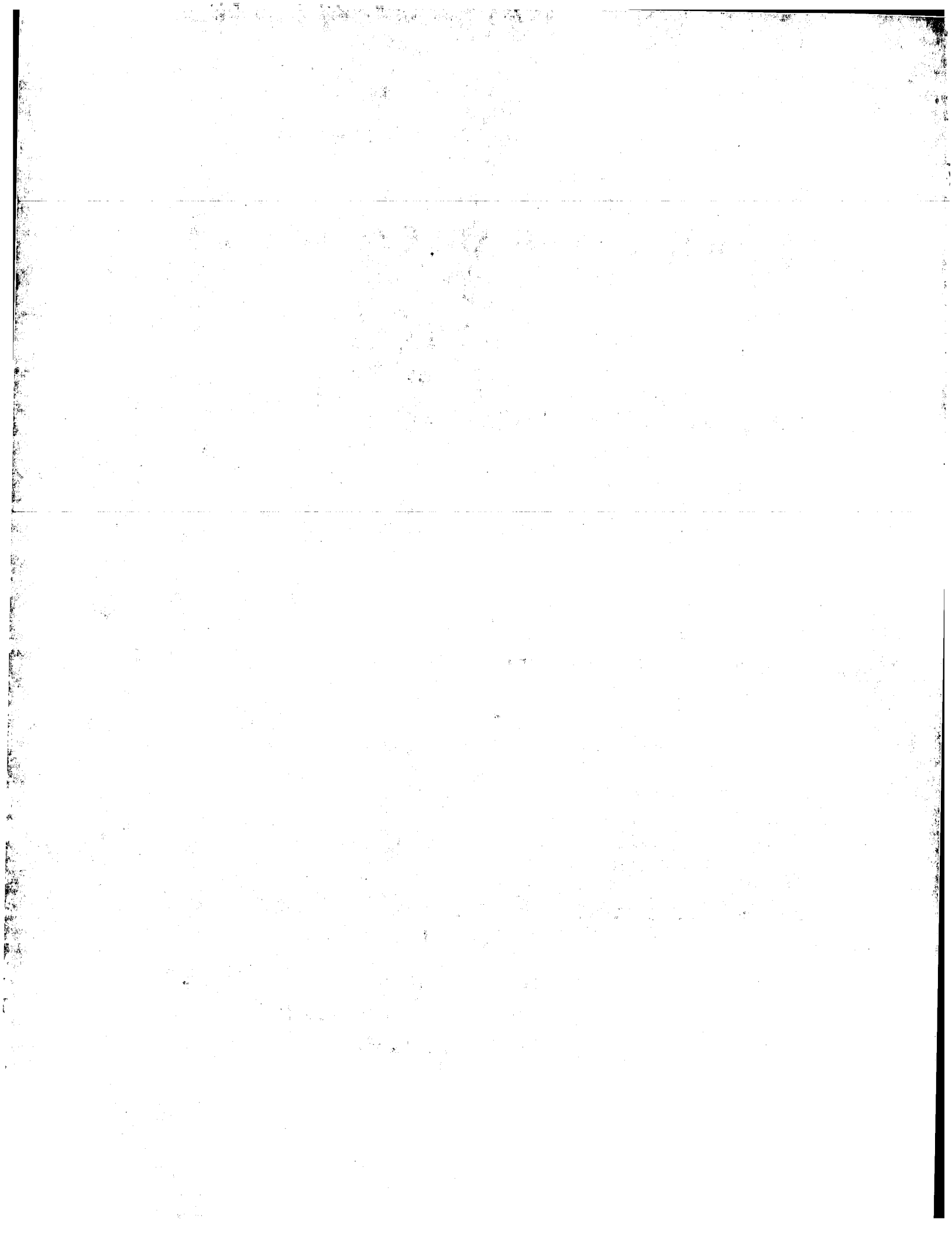
Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



XP-002128491

PD.	15-10-1994
P.	Complete 4



## First Virtual(TM) Internet Payment System

[Click here to visit site](#)

[Click here to ask a question of the entry](#)

<b>Category:</b>	Business
<b>Date of First Use:</b>	15 October 1994
<b>Number of Users:</b>	36000
<b>Description of Users:</b>	First Virtual users are shoppers, buyers and sellers of electronic information. Users, are located throughout the world and come from many different sectors, including commercial, educational, and government organizations, plus private individuals. Usage is generally determined by individual levels of demand for information and the purchasing habits of individual buyers.
<b>Number of Sites:</b>	All Internet sites (Millions)
<b>Networking:</b>	Users with computers access the Internet where they use EMAIL, TELNET, FTP or WWW Browsers to obtain accounts, and then to purchase information. Then they use Internet EMail to confirm purchase transactions. Sellers use EMail or FTP to place information on servers for sale. Internet infrastructure is critical to operations.

### Summary:

First Virtual created its Internet Payment System for buyers and sellers to transact business through safe, easy and economical means. It was designed to make information commerce accessible to the largest possible number of users around the world. They benefit from the system by buying and selling all kinds of information via E-mail (text, images, audio, video, software, etc). The one-time set-up fee for buyers is \$2.00 and for sellers is \$10.00. Buyers purchase information using ordinary EMail, FTP or World Wide Web Browsers. No additional hardware or software is required for buyers.

### Demonstration of the Utility and Capability of the NII:

The First Virtual system both uses and extends the usefulness of the Internet and the whole concept of the NII. It shows the power and utility of the existing Internet by broadly enabling electronic commerce using the existing infrastructure without need for information buyers to obtain or install new software or hardware. Only minimal software modifications (which are freely available) are needed by sellers to transact business. None are required if sellers use the FV InfoHaus. The heart of the payment system is based on Internet Protocol extensions that conform to existing Internet Standards.

First Virtual has connected its payment system to the banking network to bring merchant banking to the Internet without disruption or modification of the installed base of either the Internet or banking network.

1 of 4 Specifications for First Virtual extensions are openly published in our WWW pages, in keeping with Internet

01/24/95 16:34:14

traditions. This sets the stage for graceful evolution toward new systems to handle additional kinds of transactions.

The system creates unlimited possibilities for individuals and institutions of all kinds to produce valuable information and find buyers for it on the already operational global Internet. Suddenly, the barriers to entry in the information industry have been lowered, and a massive movement of new kinds of information into a global marketplace has begun. Given the magnitude of this paradigm shift, we expect it will take some time for people to digest it, and exploit it. The roots of this development lie in a paradigm shift caused by basic economics of electronic information commerce. Information that is delivered electronically over the Internet does not entail the normal costs of physical goods production, storage, delivery, insurance, damage, loss, or return of unsold goods. Before the NII, packaging of information required expensive embodiment into physical objects, like books, tapes, or disks, or it required a person (doctor, consultant, advisor, teacher) to deliver it. With NII delivery, virtually all these costs are absent.

Information can now be sold directly for what has been the royalty earned by an author of a publication, composer of music, or musician's or artist's rendition. Distribution channels are opened up for all manner of creative people who would not otherwise have access to the expensive distribution channels used for physical goods. Now an author only needs access to a server on the Internet, plus a First Virtual Seller's Account to be in business, selling into a huge marketplace with the NII at its core.

In addition, the bulk of the Internet infrastructure costs are paid for by the end-users, or by their sponsors. The sponsors are commercial employers, universities, governments, or increasingly, individuals who directly obtain access through a growing array of consumer access service providers. End-user payment distributes the cost of the Internet infrastructure over a huge mass of users who find value in their use. All this is analogous to the voice telephone system which is paid for by the mass of individual end-user rate payers.

#### **Example of Practical Usage of the NII:**

Without commerce on the NII, it could well become the CB craze of the 1990's. The First Virtual Payment System brings practical buying and selling to the Internet. Now anyone with valuable information to sell can do so with a very modest investment.

Commerce takes place as follows: Sellers upload information onto Internet servers and advertise it, while buyers shop for information of value. Buyers offer to purchase and submit their First Virtual Account ID for payment. The seller verifies the buyer's account, delivers the information, and informs FV of the transaction. FV contacts the buyer by Internet EMail to confirm the transaction. The buyer responds with "Yes," "No," or "Fraud" and FV takes appropriate action. If "YES", then the sale is posted to the buyer's and seller's accounts. If "NO", the seller is informed of a "NO-SALE". If "FRAUD", then the FV Account is canceled and a new one must be obtained. The financial investment is minimal for both sellers and buyers and the barriers to entry are very low.

The FV closed-loop "transaction instrument" matches the safety afforded by "Card Present" credit card transactions with signed charge slips. The buyer voluntarily takes overt action to confirm the transaction before any funds are transferred. This is clearly better than open-loop transactions where buyers type credit card numbers into World Wide Web forms, EMail messages, or verbally transmit them by telephone. Even with encryption of the transmission "envelope", open-loop transactions cannot confirm that the buyer is authorized to use the presented credit card number.

Viewed globally, information can be sold via the Internet to customers in more than 120 countries without hiring local distributors or agents. In traditional publishing, an author's royalty is a modest percentage of the retail price of a book and many authors cannot find a publisher to print their works. With of 4FV, authors can simply publish their own works and keep most of the revenue.

01/24/00 10:34:14

The one time set-up fee for a seller's account is \$10, and a small transaction fee of 29 cents, plus 2% of the amount is charged for each transaction. The 2% discount completely covers all banking and credit card system charges. This fee is competitive with regular credit card merchant accounts where discount rates can run as high as 5% for small merchants. Considering the ease of use and the increased opportunity to generate income, the FV payment system has been readily embraced by its early adopters. They are truly excited about their success. Some run profitable businesses with thousands of dollars of income in a few weeks.

Another practical aspect of the system is the way it glues together existing credit card operations of VISA and Mastercard, plus banking services of First USA Bank with transaction processors of Electronic Data Systems (EDS). After careful analysis of the FV system, and the risks that are involved, these strategic partners decided to do business with the FV closed-loop transaction instrument.

#### **Encourages and Motivates Use of the NII:**

First Virtual's Internet Payment System promotes and encourages greater use of the NII by adding electronic commerce to the array of Internet accessible services.

The New York Times (NYT 15 October 1994, page B1) credits First Virtual with "opening a new financial door on the Internet." Being able to buy and sell electronic information easily and inexpensively creates enormous possibilities for a broad range of people: a government agency that wants to recoup distribution costs by charging nominal fees for government generated information, or a housewife in Kansas selling her first novel. Other possibilities include software rental (versus outright sale); new kinds of financial information services; access to back issues of all manner of newsletters and periodicals; cost recovery for public archives of important historical information; and distribution of entertainment. The list of possibilities is endless, and the NII market is open to information creators and synthesizers of all sizes, shapes and kinds.

For example, Kee Netherly -- the largest independent shareware distributor on "the Net" uses FV to collect for his authors; NPR uses FV to sell transcripts in the InfoHaus ([www.infohaus.fv.com](http://www.infohaus.fv.com));

Soundwire sells music -- ([www.soundwire.com](http://www.soundwire.com)); The Internet Society ([www.isoc.org](http://www.isoc.org)) takes memberships; A woman supplements income with traditional Jewish recipes passed down through her family (Shapiro's Secrets... [www.infohaus.fv.com](http://www.infohaus.fv.com)); Writers sell short stories and poems (Lemon Tree Press... [www.infohaus.fv.com](http://www.infohaus.fv.com)); Newsletters are available (The Internet Letter... [www/infohaus.fv.com](http://www.infohaus.fv.com)).

It takes only minutes to open and set up a First Virtual account. A simple, yet elegant, system, FV also avoids the complexities of encryption technologies which, to date, have inhibited deployment of general purpose electronic payment systems on the NII. FV broke the logjam caused by encryption deployment delays by finding a way to provide safety and low risk for commercial operations now, without encryption. While it is clear that encryption will someday be available for broad deployment, the NII need not wait to begin serving commercial purposes. When encryption is someday deployed, it will fit into the FV system as an additional safeguard for those users who wish to use it. The FV software was designed to make this transition easy.

While it is possible today to buy through First Virtual using any currency that is supported by VISA or Mastercard, all FV payments to sellers must presently be made in US Dollars. First Virtual software was implemented to handle transactions involving many other currencies with payment to sellers in their preferred currency, making it a truly global system. Adding other currencies only requires making arrangements with banks in other countries.

Developments are under way to handle the sale of physical goods using the same closed-loop transaction instrument. This will assure that the buyer is the specific person who is authorized to make purchases with the associated credit card.

01/24/00 10:34:14

In summary – The First Virtual Payment System has seized the leadership role in providing merchant banking services on the NII. The FV payment system encourages early growth of commerce on the NII by doing what can reasonably be done now without waiting for anything.

**Advice:**

Our advice is to tread lightly when considering commerce on the Internet and to be aware of important distinctions among the various electronic commerce models in existence. First Virtual was careful to have an operational system in place before making any announcements. The goal was to avoid touting "vaporware" and to present a complete, fully accessible service at launch time. Also, we took account of the market need for time to digest our new paradigm. FV has demonstrated that new paradigm digestion processes are slower than one might wish.

**Barriers:**

There were no barriers, per se. One major challenge First Virtual had to overcome was assembling the right technical team in a virtual distributed corporate structure. For example, no two employees share the same zip code and company business is mostly conducted over the Internet. Other challenges included creating, developing and deploying a truly simple and elegant system in only 5 months while establishing the required strategic alliances with the banking industry, gaining overall acceptance from the Internet community, and marketing a service based on an entirely new paradigm. Taken together, this was an imposing set of hurdles.

**Contact Information:**

Huntington Beach, California

**Primary Activity:**

**Verification Method:**

Access the operational system...

Browse: <http://www.fv.com>;

Telnet: <telnet.fv.com>;

EMail: [info@fv.com](mailto:info@fv.com);

Shop: <http://www.infohaus.com>;

Apply: [apply@fv.card.com](mailto:apply@fv.card.com)

Info: [info@fv.com](mailto:info@fv.com)